REDACTED VERSION – PUBLICLY FILED

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

VERSUS TECHNOLOGY, INC.,	)	
	)	
Plaintiff,	)	
v.	)	Civil Action No. 04-1231 (SLR)
	)	
RADIANSE, INC.	)	**CONFIDENTIAL –**
	)	**FILED UNDER SEAL**
Defendant.	)	

RADIANSE'S CLAIM CONSTRUCTION BRIEF

Josy W. Ingersoll (#1088)
jingersoll@ycst.com
Karen E. Keller (#4489)
kkeller@ycst.com
YOUNG CONAWAY STARGATT & TAYLOR, LLP
The Brandywine Building, 17th Floor
1000 West Street
P. O. Box 391
Wilmington, Delaware 19899-0391
(302) 571-6600

OF COUNSEL:

Sibley P. Reppert
William A. Scofield, Jr.
LAHIVE & COCKFIELD
28 State Street
Boston, MA 02109-1784
(617) 227-7400

Dated: November 4, 2005

REDACTED VERSION – PUBLICLY FILED

TABLE OF CONTENTS

TABLE OF AUTHORITIES

PAGE

Cases

I. INTRODUCTION

Versus alleges infringement of claims contained in four patents[1]: U.S. Patent Nos. 5,027,314 (the "'314 patent"), 5,572,195 (the "'195 patent"), RE 36,791 (the "'791 patent")[2]; and 6,154,139 (the "'139 patent").

Radianse's proposed claim construction of each element of each of the asserted claims is set forth in tablular form in Section IV of this Brief, including the intrinsic and extrinsic evidence supporting Radianse's construction.

Following its proposed construction, Radianse explains why Versus' proposed construction is erroneous. In particular, Versus disregards the plain meaning of the words of the patents, adopts constructions contrary to the specifications of the patents, disregards the applicable file history, and proposes constructions that contradict the testimony of the inventors of each of the patents in suit.

II. THE LAW OF CLAIM CONSTRUCTION

A patent infringement analysis involves two steps: (1) construction of the patent claim at issue, followed by (2) a comparison of the claim thus construed to the accused device. *Bai v. L&L Wings, Inc.*, 160 F.3d 1350, 1353 (Fed. Cir. 1998). The former is a question of law for the court, while the latter is a question of fact for the jury. *Markman v. Westview Instruments,* 517 U.S. 370, 384-391 (1996); *Catalina Marketing Int'l v. Coolsavings.com, Inc.*, 289 F.3d 801, 812 (Fed. Cir. 2002).

No reference to the accused device should be made during the claim construction step. *Young Dental Mfg. Co. v. Q3 Special Products, Inc.*, 112 F.3d 1137 (Fed. Cir. 1997). It is only

[1] The patents-in-suit are appended to the Declaration of Sibley P. Reppert (the "Reppert Declaration") submitted herewith as Exhibits A ('314), B ('195), C ('791) and D ('139). The '791 patent is a reissue of U.S. Patent No. 5,119,104.

after the claims have been construed without reference to the accused device that those claims, so construed, are applied to the accused device to determine infringement. *SRI International v. Matsushita Elec. Corp.*, 775 F.2d 1107 (Fed. Cir. 1985).

The decision of the Federal Circuit in *Phillips v. AWH Corporation*, 415 F.3d 1303 (Fed. Cir. 2005) (*en banc*) articulates the standards for claim construction. Claim construction starts with the words of the claims, which define the patented invention. *Id.* at 1312. The claims themselves provide substantial guidance as to the meaning of particular claim terms, including the context in which a term is used in the asserted claim and the terminology of other claims in the patent. *Id.* at 1314-15. The words of the claims are generally given their ordinary and customary meaning, which is the meaning that the claim term would have to a person of ordinary skill in the art at the time of the effective filing date of the patented invention. *Id.* at 1312-14; *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996). Inventors are typically persons skilled in the field of the invention. *Phillips*, 415 F.3d 1303 at 1314. The person of ordinary skill in the art is deemed to read the claim term not only in the context of the particular claim in which it appears, but also in the context of the entire patent, including the specification. *Id.*

In cases where the ordinary meaning of claim language as understood by a person of skill in the art may be readily apparent, claim construction "involves little more than the application of the widely accepted meaning of commonly understood words." *Id.* at 1314. Where the meaning of the claim term is not "immediately apparent," the court looks to the sources available to the public that show what a person of skill in the art would have understood the disputed claim language to mean. *Id.* at 1314. Of those sources, the specification is "the single best guide to the meaning of a disputed term." *Id.* at 1315. Phillips noted that "[i]t is

…entirely appropriate for a court, when conducting claim construction, to rely heavily on the written description for guidance as to the meaning of the claims." *Id.* at 1317. The specification may reveal a special definition given to a claim term by the patentee that differs from the meaning it would otherwise possess. In such case, the inventor's lexicography governs. *Id.* at 1316.

The court should also consider the patent's prosecution history. *Id.* at 1317.

Extrinsic evidence, such as expert and inventor testimony, dictionaries, and learned treatises, may be admitted and used by the district court in its sound discretion. *Id.*

Special rules apply when a claim limitation is drafted in means-plus-function or step-plus-function format pursuant to 35 U.S.C. §112, ¶6.[3] Under that section,

> An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material or acts described in the specification and equivalents thereof.

Construction of a means-plus-function limitation involves two steps. First, the court must identify the claimed function. After identifying the claimed function, the court must then determine what structure [or acts[4]], if any, disclosed in the specification corresponds to the claimed function. *Cardiac Pacemakers, Inc. v. St. Jude Medical, Inc.*, 296 F.3d 1106 (Fed. Cir. 2002); *Kemco Sales, Inc. v. Control Papers Co., Inc.*, 208 F.3d 1352, 1360 (Fed. Cir. 2000).

---

[3] Where the claim recites a "means" or "step" for achieving a function, there is a presumption that §112, ¶6 applies. This presumption can be overcome where the claim contains sufficient structure to perform the function. *Greenberg v. Ethicon Endo-Surgery, Inc.*, 91 F.3d 1580, 1583 (Fed. Cir. 1996).

[4] With a step-plus-function claim, the "steps" refer to the generic description of elements of a process, and the "acts" refer to the implementation of such steps. Thus, "structure and material go with means, acts go with steps." *O.I. Corp. v. Tekmar Co., Inc.*, 115 F.3d 1576, 1582-1583 (Fed. Cir. 1997). "The statute thus in effect provides that an element in a combination method or process claim may be recited as a step for performing a specified function without the recital of acts in support of the function." *Id.*

Ordinary principles of claim construction govern interpretation of the claim language used to describe the function. It is improper to narrow the scope of the function beyond the claim language. It is equally improper to broaden the scope of the claimed function by ignoring clear limitations in the claim language. The court must construe the function of a means-plus-function limitation to include the limitations contained in the claim, and only those limitations. *Cardiac Pacemakers, supra*; *Lockheed Martin Corp. v. Space Systems/Loral, Inc.*, 249 F.3d 1314, 1324 (Fed. Cir. 2001). "When construing the functional statement in a means-plus-function limitation, we must take great care not to impermissibly limit the function by adopting a function different from that explicitly recited in the claim." *Generation II Orthotics, Inc., v. Medical Technology, Inc.*, 263 F.3d 1356, 1364 (Fed. Cir. 2001); *Micro Chemical, Inc. v. Great Plains Chemical Co.*, 194 F.3d 1250, 1258 (Fed. Cir. 1999).

Means-plus-function claim limitations cover the disclosed structures that correspond to the claimed function. To qualify as corresponding, the structure must not only perform the claimed function, but the specification must clearly associate the structure with the performance of the function. *Cardiac Pacemakers, supra*, 296 F.3d at 1113.

III. OVERVIEW OF THE PATENTS-IN-SUIT AND RADIANSE'S ACCUSED SYSTEM

All four of the patents asserted by Versus against Radianse involve the use of transmitters called "tags" that are placed on objects to be located by means of receivers that receive the transmissions from the tags. The '314 and '195 patents involve the use of infrared radiation only. Under those patents, each tag emits an infrared (IR) signal that contains an identifying code unique to that tag. The '139 patent covers the use of tags that "substantially simultaneously" transmit IR and radio frequency (RF) signals from separate IR and RF transmitters contained in the tag. The separate IR and RF signals transmitted from the tag each

contain the unique tag ID. The '791 patent does not specify what frequencies (i.e., IR, RF) are used for purposes of making transmissions from the tags but does require that the receivers employed by the patented location system receive transmissions from "assigned areas of a predetermined size" such that only one receiver receives a tag's transmission. The tag is located by identifying the receiver that received the transmission; the patented system does not work properly if several receivers receive a tag's transmission, i.e. if the reception areas of the receivers overlap. The '791 patent also requires that the receivers include a data communications controller that is "responsive to the receipt" of the transmission from the tag.

The prosecution history of the '791 patent is pertinent to the construction of the asserted claims of that patent. Relevant portions of the prosecution history of the '791 patent and its parent patent are attached to the Reppert Declaration submitted in support of the present brief as Exhibits E and F. In the prosecution history, the applicant distinguished prior art that had been cited against the application by the examiner by explaining that the cited reference assumes that "radio location signals transmitted from an object will be received by more than one receiver, and that position information will be developed either from provocation time differences or time of arrival differentiation." The applicant argued the patented invention was not covered by the prior art cited by the examiner, because "(a) … each receiver [is] configured to receive tag transmissions from an assigned area, and (b) … tag location [is] based on the identity of the receiver receiving the tag transmission." (Response to First Office Action at 9, Reppert Declaration, Exh. E at 9).

Radianse took the deposition of the co-inventor of the '314 patent, Wayne Duncan. Relevant portions of the deposition of Mr. Duncan are attached to the Reppert Declaration as Exhibit G. In his deposition, Mr. Duncan testified that the claim construction proposed by

Radianse, as submitted with this brief, is correct in its entirety. (Duncan Deposition at 73-74 and Deposition Exhibit 73). He also testified, as set forth below, that numerous individual elements of the asserted claims are correctly defined in Radianse's proposed claim construction.

Radianse also took the deposition of Alan C. Heller, the named inventor of the '195, '791, and '139 patents. Mr. Heller likewise testified that Radianse's proposed construction of numerous elements of those three patents was correct from his perspective as the inventor. Relevant portions of Mr. Heller's deposition testimony are highlighted and attached as Exhibit H to the Reppert Declaration.

While it is black letter law that the claims should not be construed with reference to the accused device, a brief description of the Radianse's accused system is in order, because Versus's proposed construction does exactly that. The Affidavit of Paul Tessier (the "Tessier Affidavit"), previously submitted to this Court in support of Radianse's Consolidated Motion to Dismiss, explains how Radianse's "Indoor Positioning System" ("IPS") works. (Reppert Declaration, Exhibit I). Specifically, Radianse's IPS tags transmit unique identifying codes by means of RF transmissions --- they do not do so by means of IR transmissions. (Tessier Affidavit, ¶s 6-12). The RF transmission from a Radianse tag is followed by the separate transmission of a short IR signature that does not contain tag identification information and is not required to locate the tag. *Id.*, ¶s13-16. The Radianse IPS uses multiple receivers to locate tags by determining location according to the received signal strength ("RSSI"). In Radianse's system, the receivers are not located so that only one receiver receives a transmission from a tag; rather, the reception areas of the receivers overlap.

IV. CONSTRUCTION OF THE CLAIMS IN SUIT

The following tables set forth in columnar form, from left to right: (1) the elements of each of the claims asserted by Versus in each of the four patents-in-suit; (2) the claim construction proposed by Radianse; and (3) the support relied on by Radianse for its proposed claim construction. The specific terms construed in column 2 are those claim elements that are shown in bold type in claim 1. The shaded language in column 1, and the corresponding shaded language under column 2, shows the specific elements regarding which the parties have expressed disagreement and the construction proposed by Radianse as to those specific elements. Radianse identifies in the third column the specific line and page references of the specification to which it wishes to draw the Court's attention, as well as any applicable inventor testimony and relevant portions of the prosecution history.

A.

USP 5,027,314

Claim and Claim Element	Proposed Claim Construction	Support for Proposed Construction
Clm 1. A system for tracking a number of **subjects** in a **plurality of areas comprising**:	A "subject" is an object or person to be tracked. A "plurality" is more than one. An "area" is a physical area inside a structure containing and associated with a receiver. "Comprising" means including.	**Inventor Testimony**: Co-inventor Wayne Duncan testified that [redacted] (Duncan Dep. at 33-34 and Dep. Ex. 73). The terms in the preamble have their ordinary meanings and are not specially defined in the Specification.
a plurality of **transmitters**, wherein at least one transmitter is **associated with** each of said subjects, each of said transmitters **comprising** transmission means for transmitting a **light based signal representative of an identifying code unique to that transmitter**;	A "transmitter" is a device that transmits a signal. "Associated with" means attached to related to "A light based signal" means a signal transmitted by means of infrared radiation. "Representative of" means containing. "An identifying code unique to that transmitter" means a code that identifies one and only one transmitter that is making the transmission. This is a means plus function limitation. The claimed function is "transmitting a light based signal representative of an identifying code unique to a transmitter." The disclosed structure that performs this function is a transmitter containing	**Specification**: Col. 1, ln. 58-62: "This is an identification system employing infrared radiation for communication with the system. The communication means are a plurality of individually independent transmitters each issuing a distinctive signal in infrared (IR) radiation." Col. 2, ln. 8-19: "The data on the subjects originates in IR transmitters, for example as a badge carried on the person and from a location remote to CPU and processor. The transmitter has a clock producing pulses which time the sequencing of pulses to produce a characteristic binary number issued from a light emitting diode in infrared radiation for transmission to a fixed sensor." Col. 2, ln. 28-33: "In the system of the present invention the uniquely distinctive binary coded characters are transmitted from individually independent portable transmitters by IR

	components performing each of the functions shown as blocks in Fig 2, i.e., a generator, a timer, a clock oscillator, a counter, programmable memory (PROM), an amplifier, and an IR emitter. The PROM is programmed with a specific bit pattern which will generate a unique code in a binary number that is transmitted to an infrared emitter through an amplifier. The emitter converts the electrical signals making up the code of the binary numbers into signals of infrared radiation in a wavelength of from 900 to 10,000 nanometers.	radiation to one or more receivers in a receiver network. Col. 3, ln. 66 – col. 4, ln. 2: "The transmitters 11 in a preferred embodiment are badge-size infra-red radiation emitting transmitters. A coded binary number identification is produced in each transmitter 11 and is transmitted via infrared radiation to to receiver." Col. 4, ln. 39–55 and Figs 1, 2. Col. 5, ln. 8-10. There is no support in the Specification for Plaintiff's proposed construction of "light based signal representative of an identifying code." The specification discloses no reference other than an infrared (IR) transmissions that perform the stated function of "transmitting a light based signal representative of an identifying code unique to a transmitter. **Inventor testimony**: Co-inventor Duncan testified that [redacted] (Dep. at 10-12.). He testified that [redacted] (Dep. at 26-27). Duncan testified that [redacted]

		[redacted] (Dep. at 34).
a plurality of **receivers**, wherein at least one of said receivers is **associated with each of said areas**, each of said receivers comprising a converter for converting a transmitted **light based signal** to an **electrical signal** and a **validation circuit** for processing said electrical signal to determine whether said electrical signals are **representative of the unique identifying codes associated with said transmitters**; and	A "receiver" is an assembly containing a sensor that receives infrared radiation transmitted from transmitters and that synchronizes and decodes the transmitted data. "Associated with each of said areas" means that each receiver is contained within a specific "area". A "light based signal" is an infrared signal. An "electrical signal" is a signal that uses electricity. A "validation circuit" is an electrical circuit that validates binary numbered code output from infrared transmitters by comparing it with information stored in computer memory. "Unique identifying codes associated with said transmitters" means that each transmitter possesses an identifying code that is not possessed by any other transmitter.	Col. 5, ln. 45-56: "The infrared radiation transmitter [sic] from the transmitters 11 is received by sensors 25 in the receiver assembly 12 as shown in Fig. 4... Typically one receiver 12 service [sic] and receive [sic] transmissions from a plurality of transmitters in a designated zone. Computer 30 decodes the binary numbered code output of amplifiers 26 and validates the code by comparison with information stored in the computer 30 memory." Col. 5, ln. 65-col. 6, ln. 21. Col. 7, ln. 51-65: "The computer 30 on receiving the characteristic bits identifies the code number being transmitted. When the coded binary number has been assembled in the computer 30 it is ready for validation by a comparison. The matching code number is read in from the computer memory… After the values are entered a comparison of the values is made by subtraction. If a match of values is indicated the receiver 12 recognizes the transmission as a valid one." The validation process is further discussed at col. 8, ln. 38-64 and shown in Fig. 6A.
processor means, connected to each of said receivers, for recording those	See above definitions of highlighted terms. "Scanning" means examining and obtaining information	The specification discloses a data processor 13 that is separate from CPU 15. See Figs. 1, 5 and col. 6, ln. 45-50: "The data processor 13 handles the data

electrical signals which are **representative of** said **unique identifying codes**, for recording the **receiver** which determined that such electrical signals are **representative of** the **unique identifying codes** associated with said transmitters and for determining in which of said **areas** said transmitters are located, wherein said processor means comprises **scanning means for scanning said receivers** and **accumulating means for accumulating with respect to each transmitter those areas in which receivers have determined that an electrical signal is representative of the unique identifying code associated with that particular transmitter** and for **accumulating a badge count for each accumulated area, said**	from multiple sources in an ordered sequence. "Accumulating" means collecting. This limitation contains multiple and overlapping means plus function elements covering "processor means," "scanning means," and "accumulating means." The claimed functions of the **"processor means"** are: 1. recording electrical signals which are representative of unique identifying codes transmitted by means of IR from transmitters; 2. recording the identity of the receiver which determined that such electrical signals are representative of the unique identifying codes associated with said transmitters; and 3. determining in which areas the transmitters from which signals were received by the receiver are located. The disclosed structure of the claimed **"processing means"** includes a data processor separate from the system's central computer that receives data from multiple receivers that has already been	from the receivers 12 passed by means of multiplexers 28.... [T]he data processor is connected to the main or host CPU 15..." Data processor 13 is also separate from computer 30 that is contained in the receiver as shown in Fig 4. The operation of the data processor is described at col. 8, ln. 1-13: "The computer of the data processor 13 constantly monitors all receivers 12 connected to it. When any one of the receivers signals that it has an identification signal, i.e., a badge code, the data processor 13 reads that code from the receiver and stores it in RAM memory." The data processors send data to the CPU where it is "available for further processing such as the identification of the location of the individual transmitters." (col. 2, ln. 39-42). "Scanning" and "accumulating" are described at col. 8, ln. 67-col. 10, ln. 28 and shown in flow chart form in Fig. 6: "The program recognizes the last four areas in which the badge number has been located. As to that selected group of areas the system through the program updates the location of the badge number." Col. 10, ln. 14-21: "This programmed procedure as outlined above in relation to a badge number identified in one of the monitored areas, i.e.

badge count being representative of the number of times a receiver has determined that an electrical signal is representative of the unique identifying code associated with that particular transmitter.	processed by the receivers. The processor validates the multiple receiver data streams and combines the data into a single data stream that it transmits to a separate central processing unit. The claimed function of the "scanning means" included in the "processor means" is scanning receivers. The disclosed structure of the claimed **"scanning means"** consists of receivers that receive transmissions of unique identification information from transmitters via infrared radiation, data processors that validate the identification information and store information in RAM memory, and a central processing unit that receives and stores such information and that periodically cycles through the task of requesting data from the data processors. The claimed functions of the "accumulating means" included in the "processor means" are: 1. accumulating as to each transmitter those areas from which receivers have determined that a signal has been sent by the transmitter by converting that signal into an electrical signal that is representative of the unique identifying	rooms etc. is typical as an example of the tasks performed by the program of the present invention. Thus it will be seen that the program operates to process the identified badge numbers in the monitored areas by first entering the badge number in an address in an array associated with the area where the badge number was identified and then counting and tallying the number in the respective arrays until for the limit for the particular badge is attained." **Inventor testimony**: Duncan testified that [redacted] (Dep. at 18); [redacted] (id.); [redacted] (Dep. 19); [redacted] (Dep. 23-4)

	code associated with that transmitter; and 2. accumulating a badge count for each such area signifying the number of times a receiver has determined that a signal was sent by a specific transmitter. The disclosed structure of the "accumulating means" is a central processing unit that is connected to data processors that are connected to receivers that receive transmissions of unique identifier information from transmitters via infrared.	
Clm 9. A method for tracking a number of **subjects** in a **plurality** of **areas** in a system wherein at least one **transmitter** is **associated with** each of said subjects, each transmitter being capable of transmitting a **light based signal representative of an identifying code unique to that transmitter, comprising** the steps of:	See above for the definitions of the highlighted terms. **This is a "step plus function" limitation** in which the claimed tracking method is accomplished by steps of "converting," "recording," "determining," and "accumulating."	**Inventor testimony**: Co-inventor Wayne Duncan testified [redacted] (Duncan Dep. at 33-34 and Dep. Ex. 73). See claim 1 support for construction of corresponding apparatus limitation.
converting, in a receiver, the transmitted light based signal to an **electrical**	**The claimed function of the step of "converting"** is converting the infrared signal that contains a unique identification code and that is	See claim 1 support for construction of corresponding apparatus limitation.

signal and **validating** said electrical signal to determine whether said electrical signal is **representative of the unique identifying codes associated with said transmitter**;	received by the receiver from the transmitter into an electrical signal. The disclosed acts that perform this step are receiving, synchronizing and decoding the received infrared signal by means of infrared sensors as shown in Fig 5 that detect the infrared signals and convert the infrared radiation into an electrical signal, amplifiers that amplify the electrical signals, a computer that is part of the receiver that converts the encoded bit stream to a binary non-return-to-zero bit stream also provides a synchronizing clock signal, and then sending the converted serial data stream to the data processor.	
recording those electrical signals which are **representative of said unique identifying codes**;	**The claimed function of the step of "recording electrical signals"** is recording the electrical signals, after conversion, that correspond to the unique identifying codes initially received by means of infrared radiation from transmitters being identified. The disclosed acts that perform this step are transmitting the data stream to from the data processor to the central computing unit where the data are stored.	See claim 1 support for construction of corresponding apparatus limitation.
recording the receiver which determined that such electrical signals are representative of the unique identifying codes	**The claimed function of the step of "recording the receiver"** is recording the receiver that received and validated the signal from the transmitter.	See claim 1 support for construction of corresponding apparatus limitation.

associated with said transmitters; and	The disclosed acts that perform this step are recording of code from the receiver's sensors and amplifiers in the RAM memory of the data processor and the of data to the central processing unit from the data processing computer when the central processing unit requests it from the data processing computer, as shown in Fig 6.	
determining in which of said **areas** said transmitters are located, wherein the recording the receiver and the determining steps **comprise** the steps of **scanning** said receivers and **accumulating** with respect to each transmitter those areas in which receivers have determined that an electrical signal is representative of the unique identifying code associated with a particular transmitter and accumulating a **badge count** for each accumulated area, said badge count being representative of the number of times a receiver has determined that an	**The claimed function of the step of "determining"** is determining the areas in which specific transmitters are located, including scanning the receivers and accumulating information as to the identities of the transmitter and the number of times a receiver has received a transmission from that specific transmitter. The disclosed acts that accomplish this function are the storage of data regarding receipt of signals from individual transmitters in specific areas in the RAM memory of data processors, the requesting of data by the central processing unit from the data processors of the receivers, the transmission of data from the memory of the data processors to the central processing unit, and the repeated scanning of arrays of the data processors as set forth in Fig. 7.	See claim 1 support for construction of corresponding apparatus limitation.

electrical signal is representative of the unique identifying code associated with the particular transmitter.		

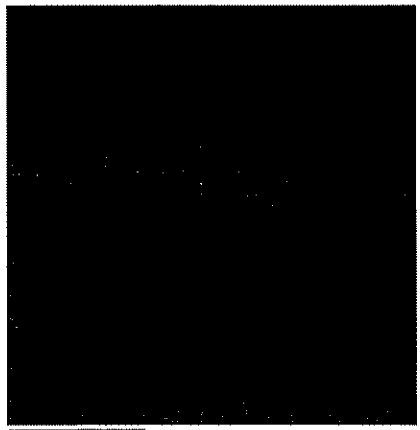
B.

USP 5,572,195

Claim and Claim Element	Proposed Construction	Support for Proposed Construction
Clm 1. An object location and tracking system for tracking **infrared transmitters that transmit identifying codes, comprising**:	"Infrared transmitters that transmit identifying codes" are transmitters that transmit identifying codes using infrared. "Comprising" means including.	**Specification:** Fig. 5, showing "IR Tag 328" with "ID 15" being transmitted to "IR Sensors 324". Col. 4, ln. 43-47: "The infrared collector 302 connects to infrared sensors 322, 324, and 326. These infrared sensors receive transmissions from TAGs 328 and 330. These TAGs provide unique identification codes." **Inventor Testimony:** [redacted] (Heller Dep. at 36 and Dep. Ex. 9).
a computer network for passing messages;	The words in this limitation have their ordinary meanings.	
a computer connected to said network, said computer including means for sending and receiving messages over said computer network in a **variable-based protocol that implements object identifier variables**;	A **"variable based protocol"** is a protocol that uses variables to provide information about the network being managed, allowing for an expandable, open-ended format for providing data. Under a variable based protocol, a management information base (MIB) is established for the specific system being monitored. In the MIB variables are assigned for the information to be communicated. When information is to be	**Specification:** Col. 2, ln. 1-16: "The computer communicates with the interface circuitry using object identifier variables. The object identifier variables identify both the unique identification of the various sensors, touch ports, and external controllers, as well as the unique identities of infrared transmitters that come within the proximity of an infrared sensor, as well as touch memories that are placed within the touch ports. The computer

	communicated the assigned variable representing that variable is used. If additional information needs to be conveyed, the MIB is updated so new variables are assigned for the additional information. Messages or signals sent using a variable based protocol vary in content and length depending on the information being conveyed. An **"object identifier"** is a software data construct used in a computer network in which objects (such as transmitters to be located in an object location system and sensors receiving signals from those transmitters) are assigned identifiers by the network. **"Object identifier variables"** are variables that vary in content and length based on the information being conveyed and that are used in a variable based protocol to correspond to objects to be tracked or located. **This is a "means plus function" limitation.** The claimed function is "sending and receiving messages over a computer network in a variable-based protocol that implements object identifier variables." The disclosed structure is a computer network including infrared transmitters, infrared sensors, external device	accesses these devices using object identifier variables and a variable-based protocol, both receiving stimuli from the devices and sending control information to control the external devices. Using this system, a standard networking protocol based on an object identifier paradigm provides for a device independent solution to problems of interconnecting object location, tracking, and control devices on the networks." Col. 11, ln. 30-38: "This section defines Objects in the Management Information Block of the SNMP subnetwork implementation. A subnetwork Object Identifier is specified in the following manner: <resource class><variable number [index [sequence number.[,RSN]]] Resource Class - Each resource (collector, etc.) may be assigned a Resource Class that can be used to separate or group resources in the network… Variable Number (value class) – Each subnetwork resourse supports variables in three groups. Variables 0,1,2, and 3 are fundamental to all devices… Variables 5 theough 13 are largely universal among resources. Variables above 13 are resource-specific." Col. 12, ln. 18-Col. 15, ln. 13 (list of variables).

	controllers, concentrators, and control processors or personal computers as set forth in Figs 1-5.	A "variable based protocol" is stated in claim 1 to be a protocol for assigning variables to tag ID codes. See, col. 32, ln. 55 – 61: "means for providing to said computer network object identifier variables in the variable-based protocol corresponding to the transmitted identifying codes received from said signals from said plurality of infrared sensors. **Inventor Testimony:** [redacted] (Heller Dep. at 37 and Dep. Ex. 8) [redacted] (Heller Dep. at 38).
a plurality of **infrared sensors** for receiving transmitted **identifying codes** from the **infrared**	"Infrared sensors" are sensors that receive infrared transmissions. "Identifying codes" are codes identifying a transmitter.	**Specifiction:** Fig. 5, showing "IR Tag 328" with "ID 15" being transmitted to "IR Sensors 324".

transmitters, said plurality of infrared sensors providing signals containing the **transmitted identifying codes**; and	"Infrared transmitters" are transmitters of infrared signals. "Transmitted identifying codes" are identifying codes transmitted by means of infrared signals.	Col. 4, ln. 43-47: "The infrared collector 302 connects to infrared sensors 322, 324, and 326. These infrared sensors receive transmissions from TAGs 328 and 330. These TAGs provide unique identification codes." **Inventor Testimony:**  [redacted] (Heller Dep., pp. 46-48 and Dep. Ex. 8).
interface circuitry coupling said plurality of **infrared sensors** to said computer network, said interface circuitry including means for providing to said computer network **object identifier variables** in the **variable-based protocol** corresponding to the **transmitted identifying codes** received from said signals from said plurality of infrared sensors.	See above definitions of highlighted terms. **"Interface circuitry"** is electronic circuitry that performs the below-stated functions contained in a "concentrator" that is connected on one side to a workstation PC and on the other side to "collectors" that are in turn connected to "sensors". **This is a means plus function limitation.** The claimed function is "providing to a computer network object identifier variables in a variable-based	**Specification:** Col. 2, ln. 60 -col. 3, ln. 7: "Fig 1 shows a system implementing networked data collection with a single workstation. A logger and workstation PC 100 is connected to a hub 10 using standard networking hardware, preferably either Arcnet or Ethernet. The hub 102 is then connected to a concentrator 104, and multiple concentrators can be present in the network. The concentrator 104 is connected to collectors 106 and 108 through a subnetwork, preferably implemented using twisted pair wires. The collectors 106 and108, as can be seen, are daisy chained…[T]he collectors

	protocol corresponding to identifying codes transmitted using infrared and received by infrared sensors." The disclosed structure is set forth in Figs 1-5 and includes transmitters that employ infrared radiation to transmit codes identifying the transmitters and infrared sensors that receive such transmissions.	106 and 108 interface with various hardware sensing and control devices…." Col. 8, ln. 27-33: "The concentrator 104 is effectively implemented as an intelligent interface between the Arcnet or Ethernet network and the twisted pairs RS-485 subnetwork. Similar to the controller circuitry illustrated in FIG. 9, and it preferably includes a micontroller, as well as interface circuitry for both of the networks."
Clm. 13. A method for tracking and locating objects in a system with a computer network, a computer connected to the computer network, **infrared sensors**, and interface circuitry connecting the computer network to the infrared sensors, the infrared sensors being adapted to receive **unique identifying codes** from **infrared transmitters**, comprising the steps of:	See above for definitions of highlighted terms. A "unique identifying code" is an identifying code that identifies one and only one object in a system of multiple objects. **"Unique identifying codes from infrared transmitters"** are unique identifying codes transmitted using infrared by infrared transmitters.	See claim 1 support for construction of corresponding apparatus limitation.
providing **object identifier variables** in the interface circuitry, said object	See above.	See claim 1 support for construction of corresponding apparatus limitation.

identifier variables adapted for being communicated over the computer network in a **variable based protocol**;		
receiving in one of the infrared sensors a transmission from one of the infrared transmitters containing a **unique identifying code**;	See above.	See claim 1 support for construction of corresponding apparatus limitation.
sending the received **unique identifying code** from the infrared sensor to the interface circuitry;	See above.	See claim 1 support for construction of corresponding apparatus limitation.
providing the **unique identifying code** in the interface circuitry to the computer network in association with an **object identifier variable**; and	See above.	See claim 1 support for construction of corresponding apparatus limitation.
receiving in the computer the **unique identifying code** from the network by accessing its associated **object identifier variable**.	See above 1.	See claim 1 support for construction of corresponding apparatus limitation.
Clm. 18. A method for tracking and locating objects in a system with a computer network, a computer connected to the	See above for definitions of highlighted terms. An "external device controller" is a controller used to control external devices.	**Specification**: Col. 4, ln. 63-67: "The hybrid controller 306 combines the various aspects of the touch collector 300, the infrared collector 302, and the relay

computer network, **infrared sensors**, and interface circuitry connecting the computer network to the infrared sensors, the infrared sensors being adapted to receive **the unique identifying codes from infrared transmitters**, also for providing physical responses and the system having an **external device controller**, comprising the steps of:		controller 304, thus providing both sensors for touch memories, sensors for infrared TAGs, and control for external devices."
receiving in one of the **infrared sensors** a transmission from one of the **infrared transmitters** containing a **unique identifying code**;	See above for definitions of highlighted terms.	See above
sending the received **unique identifying code** from the **infrared sensor** to the interface circuitry;	See above for definitions of highlighted terms.	See above
providing the **unique identifying code** in the interface circuitry to the computer network;	See above for definitions of highlighted terms.	See above
receiving in the computer the **unique identifying**	See above for definitions of highlighted terms.	See above

code from the network;		
sending a message from the computer to the **external device controller**, the message containing an identification of a channel of the external device controller instructing the external device controller to activate the channel, said message sent in response to said **unique identifying code** provided by the interface circuitry to the computer network: and	See above for definitions of highlighted terms.	See above
activating in the **external device controller** the channel identified in said sending a message step in response to receiving said message sent by the computer.	See above for definitions of highlighted terms.	See above

C. USP RE36,791

Claim and Claim Element	Proposed Construction	Support for Proposed Construction
Clm 25.[5] A location system for locating objects within a tracking environment using **area-detection** by receivers that receive electromagnetic transmissions from **assigned areas**, **comprising**:	**"Area detection"** means a radiolocation system using receivers configured to detect TAG transmissions only from respective non-overlapping areas, so that signals from an object will be received by only one receiver. **"Assigned areas"** are areas around receivers that are configured such that the signal from an object within that area is received by only one receiver. "Comprising" means including.	**Specification:** Col. 11, ln. 10-25: "2. Radiolocation System – Area Detection. As a low cost alternative to the high resolution embodiment of the radiolocation system using time-of-arrival, the radiolocation system of the present invention can be implemented as a low resolution embodiment using receivers configured to detect TAG transmissions only from respective assigned areas.... [R]eceivers only receive TAG transmissions from TAGs transmitting within respective assigned areas, so that object location is effected when a receiver receives a TAG transmission with the TAG ID. Col. 11, ln. 43-48: "In this case, object location resolution is a function of receiver spacing, with TAG transmitter power being cooperatively selected so that a TAG transmission is received by the most proximate receiver (in this configuration, receipt of a TAG transmission by more than one receiver represents a loss of object location resolution.)"

[5] Versus is not asserting infringement of Claim 25, but is asserting Claim 39 that includes all of Claim 25.

		File History: Response to First Office Action, App. Ser. No. 07/518,802, Feb. 1, 1991 (Reppert Decl., Ex. E) at 9: "The area-detection embodiment of Independent Claims 25 and 52 includes an array of receivers distributed within a tracking area, (a) with each receiver being configured to receive TAG transmissions from an assigned area, and (b) with TAG location being determined based on the identity of the receiver receiving a TAG transmission. Neither of these elements is taught or suggested by Hiraiwa, alone or in combination with any of the other cited references. Specifically, none of the cited references, or any other prior art known to Applicant, teaches or suggests a radiolocation technique based on an array of receivers each with an assigned area of reception in which position information is based on the identity of a receiver receiving such transmission. Moreover, none of these references provides the slightest motivation for implementing a radiolocation system using such area-detection techniques, but rather, actually teach away from that approach to radiolocation. Thus, all of the references assume that radiolocation signals transmitted from an object will be received by more than one receiver, and that position information will be developed either from propagation time differences or time-of-arrival differentiation."

for each object, a **TAG transmitter** for transmitting, at selected intervals, **TAG transmissions** that include a **unique TAG ID**;	A "TAG transmitter" is a transmitter attached to an object to be located. A "TAG transmission" is a transmission from a TAG transmitter. "Unique TAG ID" means an identification that is unique to a specific TAG transmitter, so that every TAG has a different identification.	Col. 1, ln. 37: "tags" are transmitters. These terms have their ordinary meanings.
an array of receivers distributed within the tracking area, with each receiver being configured to receive TAG transmissions from an **assigned area of a predetermined size**;	**"Assigned area of predetermined size"** means an area surrounding a receiver that is configured in advance so that the signal from an object within that area is received only by one receiver.	See above re construction of "assigned area." **File History**: Response and Amendment, dated July 3, 1995, at 8 (Response to the First Office Action (Reppert Affidavit, Ex. F) at 8:): "The claims were rejected for the use of "being configured to receive" and "responsive to the receipt."…[I]n reading the specification, one of ordinary skill in the art would clearly understand want this claim covers—it claims a receiver that is configured to receive TAG transmissions from an assigned area. The claim language is further definite because it covers certain designs and excludes others. <u>If all receivers received transmissions from the same broad area, for example (as could occur in certain types of radio-location systems), the limitation would not be met.</u>"

each receiver including a **data communications controller responsive to the receipt of a TAG transmission** for providing a **corresponding area-detection packet** that includes the received TAG ID; and	"Data communications controller" means a programmed controller equivalent to a diskless networked processor that controls the transmission of data over a network. **"Responsive to the receipt of a TAG transmission"** means providing an output in response to the receipt of a TAG transmission. A "corresponding area-detection packet" is a packet of information provided by the data communications controller that that corresponds to the TAG transmission received from an assigned area and that includes the identification of the tag contained in the TAG transmission.	**Inventor Testimony:** [redacted] (Heller Dep., Ex. H). **Specification**: Col. 2, ln. 40-44: "Each receiver includes a data communications controller. The data communications controller in each receiver is responsive to the receipt of a TAG transmission for providing a corresponding AREA-DETECTION packet including at least the TAG ID from the TAG transmission." Col. 12, ln. 3-26: "Referring to FIG. 2b, for the low resolution embodiment, the radiolocation receiver 60 can be significantly reduced in complexity and cost by eliminating those components associated with time-of-arrival detection. Thus, the only circuits that need be included are the spread spectrum receiver 66 and the programmed controller 68…Thus, in operation, the spread spectrum receiver would operated as described in Section 3, receiving a TAG transmission from the receiver front end and recovering the TAG ID and motion status from the TX-packet, outputting an RX-packet with the recovered TAG ID motion status. The RX-packet would be retrieved by the programmed controller. The programmed controller would generate a corresponding AREA-DETECTION packet

		including the TAG ID and motion status. The AREA-DETECTION packet would be communicated over the LAN to the radiolocation system processor." Col. 21, ln. 35-6: "[T]he programmed controller is equivalent to a diskless, networked processor…" **File History**: Response and Amendment, dated July 3, 1995, at 9 (Reppert Decl., Ex. F): "Turning to "responsive to the receipt," the data communication controller provides an area detection packet in response to the receipt of a TAG transmission…Specifically, the data controller provides a packet in response to the receiver receiving a TAG transmission. Applicant respectfully requests withdrawal of these rejections." **Inventor Testimony**: Q. And what do you mean by the word "responsive"? [redacted] (Heller Dep. at 61).

a **location processor** for receiving the **area-detection packets**, and for determining the location of each TAG, and its associated object, **based on** the identity of the receiver receiving the TAG transmissions for that TAG.	A "location processor" is a processor that determines location. An **"area detection packet" is a packet** of information that corresponds to a TAG transmission from an assigned area and that includes the identification of the TAG contained in the TAG transmission. "Based on" means on the basis of. The "identity of the receiver" is the assigned area in which the receiver is located.	Col. 12, ln. 27-36: "The radiolocation system processor would receive AREA-DETECTION packets from the receivers of the radiolocation array, and perform object-location processing to update the object location database. For this embodiment which uses area detection rather than time-of-arrival differentiation, object location for a TAG need not be computed, but only recorded based on the receipt of AREA-DETECTION packets including the TAG ID from the receiver assigned to the area in which the TAG (object) is located."
Clm 39. The location system of claim 25, wherein the receivers are coupled to the **location processor** by a local area network, with each receiver including a **LAN** interface, such that the **area detection packets** are communicated to the location processor over the LAN.	See 25 for the construction of highlighted terms. "LAN" means local area network.	See above.

Clm 48. A method of locating objects within a tracking environment using **area-detection** by receivers that receive electromagnetic transmissions from **assigned areas, comprising**:	See 25.	See 25
for each object, providing a **TAG transmitter** for, at selected intervals, **TAG transmissions** that include a **unique TAG ID**;	See 25.	See 25
providing an array of receivers distributed within the tracking area, with each receiver being configured to receive **TAG transmissions** from an **assigned area of a predetermined size**;	See 25.	See 25
each receiver being **responsive to the receipt of a TAG transmission** for providing a **corresponding area-detection packet** that includes the received TAG ID; and	See 25.	See 25

determining the location of each TAG, and its **associated object**, based on the identity of the receiver receiving the TAG transmissions for that TAG as represented by the **area-detection packet** provided by such receiver that received the TAG transmissions.	"Associated object" is the object to which the tag is attached. See 25.	See 25
a location processor for receiving the **area-detection packets**, and for determining the location of each TAG, and its associated object, based on the identity of the receiver receiving the TAG transmissions for that TAG.	See 25.	See 25
Clm. 66 A location system for locating objects within a tracking environment using area-detection by receivers that receive transmissions from assigned areas, comprising:	See 25.	See 25

for each object, a **TAG transmitter** for transmitting at selected intervals, **TAG transmissions** that include a **unique TAG ID**;	See 25.	See 25
an array of receivers distributed within the tracking area, with each receiver being configured to receive **TAG transmissions** from an **assigned area of a predetermined size**;	See 25.	See 25
each receiver including a data communications controller responsive to the receipt of a TAG transmission for providing a **corresponding area-detection packet** that includes the received TAG ID;		See 25

a location processor for receiving the **area-detection packets**, and for determining the location of each TAG, and its associated object, based on the identity of the receiver receiving the TAG transmissions for that TAG; and	See 25.	See 25
a local area network, said array of receivers being coupled to the location processor by said local area network, with each receiver including a **LAN** interface, such that the **area detection packets** are communicated to the location processor over said LAN.	See 25 and 39.	See 25

D. USP 6,154,139

Claim and Claim Element	Proposed Claim Construction	Support for Proposed Construction
Clm 1. A method for locating subjects within a tracking environment, the method **comprising** the steps of:	"Comprising" means including.	
for each **subject**, providing a **TAG** capable of transmitting a **substantially line-of-sight signal including** a **unique TAG ID substantially simultaneously** with a **substantially non-line-of-sight signal** also including the unique TAG ID;	A "subject" is an object or person to be tracked. A "TAG" is a battery-operated badge that contains a transmitter. A **"substantially line of sight signal"** is a signal such as an infrared signal or a visual light wave signal that will not travel through common building materials that are used to form a room in a building (wood, plaster, drywall, etc.). **"Including"** means containing. A "unique TAG ID" is an identification that is unique to a specific TAG. **"Substantially simultaneously"** means at the same time. A **"subtstantially non-line-of-sight signal"** is a signal such as a radio frequency signal or an ultrasonic signal that travels through common building materials that are	**Specification:** Abstract: "A method and system utilize both the radio frequency (RF) and infrared (IR) parts of the electromagnetic spectrum to locate subjects (i.e. objects and persons) within a tracking environment. The system includes a battery-operated, microprocessor-based badge for each subject to be located." Col. 3, ln. 63-col. 4, ln. 4: "[E]ach tag emits or transmits substantially line-of-sight and substantially non-line-of-sight signals. The signals in the preferred embodiment are RF and IR…[T]he benefit of IR is its high line-of-sight nature. The use of this feature enables processing software to infer that the signal is highly proximate (line-of-sight or almost line-of-sight) to the transmitter…The use of RF obviates the requirement that a badge or TAG is line-of-sight when a bush button of the TAG is pushed. Further, the requirement to have a sensor in every room is obviated…"

	used to form a room in a building.	Col. 4, ln. 64-col. 5, ln. 1: "The method includes the steps of providing, for each subject, a TAG for transmitting both a substantially line-of-sight signal including a unique TAG ID and a substantially non-line-of-sight signal also including the unique TAG ID." Col. 5, ln. 52-58: "In general, each badge emits a hemisphere of digitally encoded infrared (i.e. IR) light as indicated by lines 14. Preferably, the digitally encoded infrared light includes a 42 bit packet having a fixed 16 bit ID plus other network information." **Inventor Testimony:** [redacted] (Heller Dep., at 159-160). [redacted] (*Id.*). [redacted] (*Id.* at 161). [redacted] (*Id.*).
providing an **array** of receivers distributed within the tracking environment, wherein the array of receivers includes **an extended area receiver** for receiving a plurality of	An "array" is a grouping or arrangement. **"An extended area receiver"** is a single receiver that receives "substantially non-line-of-sight signals" as defined above. **"A plurality of limited area receivers"** means numerous	Col. 5, ln. 1-12: "An array of receivers distributed within the tracking environment is also provided, wherein the array of receivers includes an extended area receiver for receiving a plurality of substantially non-line-of-sight signals and a plurality of limited area receivers. Each of the limited area receivers receives

substantially non-line-of-sight signals and **a plurality of limited area receivers**, each of the limited area receivers receiving substantially line-of-sight signals;	receivers that receive "substantially line-of-sight signals" as defined above.	substantially line-of-sight signals."
generating an **extended area detection packet** including the unique TAG ID in response to each received non-line-of-sight signal;	An "extended area detection packet" is a set of RF electrical signals containing the unique identification of a tag that is created in response to the receipt of a "non-line-of-sight" signal from the tag. **"In response to"** means triggered by.	Col. 5, ln. 7-9: "An extended area detection packet is generated including the unique TAG ID in response to each received non-line-of-sight signal." Col. 5, ln. 17-19 "Preferably, the line-of-sight and non-line-of sight signals are electromagnetic signals such as radio frequency signals and infrared signals." **Inventor Testimony:** [redacted] (Heller Dep. at 162). [redacted] [redacted] (*Id.* at 163-4).
generating a **limited area detection packet** including the unique TAG ID in response to each received line-of-sight signal; and	A "limited area detection packet" is a set of IR electrical signals containing the unique identification of a tag that is created in response to the receipt of a "line of sight" signal from the tag.	Col. 5, ln. 9-12: "The method further includes the step of generating a limited area detection packet including the unique TAG ID in response to each received line-of-sight signal."

		Inventor Testimony: [redacted] (Heller Dep. at 164).
determining the location of each **TAG** and its associated **subject** based on the identity of the **extended area and limited area receivers** for the TAG as represented by its **extended area and limited area detection packets.**	See above definitions of highlighted terms.	Col. 5, ln. 12-16: "Finally, the method includes the step of determining the location of each TAG and its associated subject based on the identity of the extended area and limited area receivers for the TAG as represented by its extended area and limited area detection packets."
Clm 5. A system for locating subjects within a tracking environment, the system including:		
for each **subject**, a **TAG** capable of transmitting a **substantially line-of-sight signal** including a **unique TAG ID substantially simultaneously** with a **substantially non-line-of-sight signal** also including the **unique TAG ID**;	Highlighted terms are defined above regarding claim 1.	Fig. 1 shows the claimed TAG showing separate IR and RF transmitters.
a receiver assembly including an **array** of receivers distributed within the tracking environment, wherein the array of receivers includes **an**	See 1. A "receiver assembly" is a combination of receivers, some of which are "extended area receivers" that receive only "non-line-sight" signals such as radio frequency signals, and others of which	See claim 1. Fig. 1 shows the receiver assembly with separate IR receivers 20 and RF receiver 26. See, col. 6, ln. 1-11.

extended area receiver for receiving **a plurality of substantially non-line-of-sight signals**, the receiver assembly generating an **extended area detection packet** including the **unique TAG ID** in response to each received **non-line-of-sight signal**, the array of receivers also including **a plurality of limited area receivers**, each of the limited area receivers receiving substantially line-of-sight signals, the receiver assembly generating a **limited area detection packet including the unique TAG ID in response to each received line-of-sight signal;**	are "limited area receivers" that receive only "line-of-sight" signals such as infrared signals.	
a **data communications controller** coupled to the receiver assembly for collecting the **extended area and limited area detection packets**; and	A "data communications controller" is a device connected to a "receiver assembly" that collects data from the receivers in the receiver assembly consisting of the "extended area" and "limited area" detection packets.	Fig 1. discloses "micro-processor based collector 30 which "takes the incoming data packets, buffers them and prepares them for transfer to a concentrator 32 of the system 10." Col. 6, ln. 12-18.
a **location processor coupled** to the controller	A "location processor" is a computer connected to a "data communications controller."	Fig. 1, "host computer 36."

for receiving the collected detection packets and for determining the location of each TAG and its associated subject based on the identity of the extended area and limited area receivers for the TAG as represented by its extended area and limited area detection packets.		

V. COMMENTS CONCERNING VERSUS' PROPOSED CONSTRUCTION

Radianse will address Versus's proposed claim construction in its responsive brief, and highlights here some of the the reasons why Versus's construction is erroneous.

Regarding each of the patents containing "means-plus-function" and "step-plus-function" claims that must be construed as discussed above (at pp. 6-7), Versus baldly denies such claims fall within 35 U.S.C. §112 ¶6, disregarding the actual language of the claims with the false assertion that the terms in question "do not require construction because [their] meaning is self-evident."

Versus incorrectly seeks a construction of the '314 patent that "*light based signal representative of an identifying code unique to that transmitter*" would include a signal other than an IR signal with its proposal that "representative of" means "associated with." Obviously, Versus seeks a construction broad enough to cover Radanse's IPS, that uses RF signals but not IR signals containing the tag's unique code. Radianse's construction flies in the face of the language of asserted claims 1 and 9, the clear language of the specification, and the testimony of

Wayne Duncan, co-inventor of the '314 patent. The specification says that the tags "each issue a distinctive signal in IR radiation," and there is no mention anywhere in the patent of some non-IR transmission that is somehow "associated with" the IR signal and that contains the unique tag ID. Inventor Duncan agreed completely with Radianse's proposed construction in its entirety (Duncan dep. at 73-4), and that "light based" means IR.

As to the '195 patent, Versus blithely asserts that the term "*variable-based protocol*" requires no construction because "its meaning is self evident," when Versus' own expert, Walter Leipold, has opined that such term "has no particular technical meaning" and that "I have never encountered this term outside of the '195 patent." In fact, the '195 patent contains many pages of specification that explain the technical meaning of "variable based protocol," as set forth in Radianse's proposal above. In another transparent ploy to construe the asserted claim with reference to the accused Radianse IPS system, Versus asserts (regarding claim 13) that "*unique identifying codes from infrared transmitters*" means "a unique identifying code that is media independent." There is absolutely no support for such construction in the intrinsic or extrinsic evidence regarding this patent. The words of the claim themselves make it clear that the tag transmission is one made via IR, not one that is "media independent." The inventor, Alan C. Heller, so testified. (Heller Dep. at 46-48).

Regarding asserted claims 39, 48 and 66 of the '791 patent, Versus conveniently forgets about the file history, in which the inventor distinguished the prior art cited by the examiner with the argument that all of the cited prior art involved systems in which signals transmitted from tags were received by more than one transmitter.[6] Under the doctrine of prosecution history estoppel, Versus is estopped from arguing that the patent could be construed to cover a definition of "*assigned area of predetermined size*" wherein the signals transmitted by tags are received by

more than one transmitter. *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co. Ltd.*, 535 U.S. 722, 729, 122 S. Ct. 1831, 1838, 152 L. Ed. 2d 944 (2002); *Bayer AG v. Elan Pharm. Corp.*, 212 F.3d 1241 (Fed. Cir. 2000); *Warner-Jenkinson*, 520 U.S. at 30-31; *Pall Corp. v. Micron Separations, Inc.*, 66 F.3d 1211 (Fed. Cir. 1995); *Coleco Industries, Inc. v. U.S. Int'l. Trade Comm.*, 573 F.2d 1247 (C.C.P.A. 1978). As to the construction of "*responsive*," Versus disregards the statement in the file history that "responsive to the receipt" means "in response to the receipt."[7] Finally, Versus ignores the testimony of Inventor Heller that in his invention the area around his receivers is configured so that the signal from an object in that area is received by only one receiver, and also that the term "responsive to the receipt" means that the receipt of a signal triggers a response. (Heller Dep. at 60, 61).

Versus' proposed construction of "*including*" in the term "*substantially line-of-sight signal including a unique TAG ID*" as meaning "associated with" under the '139 patent mirrors its identical proposed construction of "*representative of*" under the '314 patent as discussed above, and is wrong for the similar reasons. Claim 1 of the '139 patent itself makes it clear that there are two distinct signals involved, one IR and the other RF, each of which contains the unique tag ID. "Including" means "containing" under the plain meaning of claims 1 and Claim 1 cannot be construed – as Versus proposes -- such that it could cover a transmission of an IR signal that did not contain a unique tag ID but that was somehow "associated with" an RF signal that did include a unique tag ID.

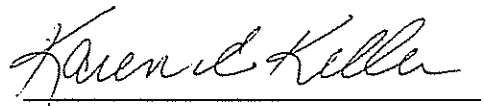
[6] Reppert Affidavit, Exhibit F at 8.
[7] Reppert Affidavit, Exhibit F at 9.

VI. CONCLUSION

For the reasons set forth above, Radianse respectfully requests that the Court construe each of the elements of each asserted claim of the four patents-in-suit in the manner as forth above in Radianse's claim construction tables.

Respectfully submitted,

YOUNG CONAWAY STARGATT & TAYLOR, LLP



Josy W. Ingersoll (#1088)
jingersoll@ycst.com
Karen E. Keller (#4489)
kkeller@ycst.com
The Brandywine Building, 17th Floor
1000 West Street
P. O. Box 391
Wilmington, Delaware 19899-0391
(302) 571-6600

OF COUNSEL:
Sibley P. Reppert
William A. Scofield, Jr.
LAHIVE & COCKFIELD
28 State Street
Boston, MA 02109-1784
(617) 227-7400

Dated: November 4, 2005

REDACTED VERSION – PUBLICLY FILED

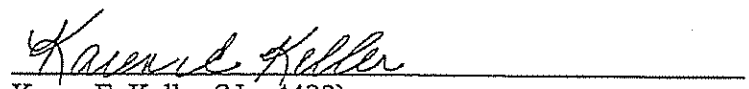
CERTIFICATE OF SERVICE

I, Karen E. Keller, Esquire, hereby certify that on November 4, 2005, I caused to be electronically filed a true and correct copy of the foregoing document with the Clerk of the Court using CM/ECF, which will send notification that such filing is available for viewing and downloading to the following counsel of record:

George Pazuniak , Esquire
Connolly Bove Lodge & Hutz LLP
The Nemours Building
1007 North Orange Street
PO Box 2207
Wilmington, DE 19899

I further certify that copies of the foregoing document were served by hand delivery on the above-listed counsel of record.

YOUNG CONAWAY STARGATT & TAYLOR, LLP



Karen E. Keller (No. 4489)
The Brandywine Building
1000 West Street, 17th Floor
Wilmington, Delaware 19801
(302) 571-6600
kkeller@ycst.com

Attorneys for Radianse, Inc.

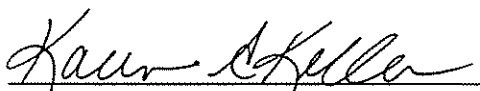
CERTIFICATE OF SERVICE

I, Karen E. Keller, Esquire, hereby certify that on November 14, 2005, I caused to be electronically filed a true and correct copy of the foregoing document with the Clerk of the Court using CM/ECF, which will send notification that such filing is available for viewing and downloading to the following counsel of record:

George Pazuniak , Esquire
Connolly Bove Lodge & Hutz LLP
The Nemours Building
1007 North Orange Street
PO Box 2207
Wilmington, DE 19899

I further certify that copies of the foregoing document were served by hand delivery on the above-listed counsel of record.

YOUNG CONAWAY STARGATT & TAYLOR, LLP



Karen E. Keller (No. 4489)
The Brandywine Building
1000 West Street, 17th Floor
Wilmington, Delaware 19801
(302) 571-6600
kkeller@ycst.com

Attorneys for Radianse, Inc.